

## DESCRIPTION

### GAS BALLOON HAVING FLOATING HEIGHT CONTROL ABILITY

#### FIELD OF THE INVENTION

5       The present invention relates to a gas balloon having floating height control ability, more particularly, a gas balloon capable of floating in air by static buoyancy of gas, comprising balloon member and weight control  
10 member of the balloon wherein the handle part is formed integrally underneath of the balloon member.

#### BACKGROUND OF THE INVENTION

15       The present invention relates to a gas balloon having floating height control ability, more particularly, a gas balloon capable of floating in air by static buoyancy of gas, comprising balloon member and weight control member of the balloon, wherein handle part is  
20 formed integrally underneath of the balloon member, wherein the balloon member comprises reinforcement coating layer, silver foil coating layer and outer surface fabric cloth while said handle part, the  
25 outer part, several magnetic pieces which the

weight is deferent from each other are attached to be attaching/detaching easily.

Such gas balloon can be controlled by its floating height by attaching or removing the magnetic pieces cutting-off piece along said  
5 dotted line formed on the handle part of the balloon member, while the balloon is under floating condition simultaneously. The gas balloon according to the invention can keep its floating  
10 height to a constant level by removing the large and small magnetic pieces on the weight control member continuously to lead rising of the balloon, especially, even in case the balloon which is used for long term gradually falls down since it causes  
15 gas filled in the balloon member flowing out of the member as time goes by, thus, induces loss of the static buoyancy of the member.

Conventionally, it is generally known that a balloon means a substance rising and floating by static buoyancy of  
20 gas filled in air bag of the substance made of cloth covered with rubber material (at present, mostly made of synthetic resin such as PVC) without supply of power and includes a heat balloon using hot air in the air bag heated by way of burner and/or a gas balloon using hydrogen or helium gas.  
25 The balloon further includes a mooring balloon used to

suspend the balloon to ground and/or ships with rope, a free balloon drifting in the air by person took in the balloon, etc. based on the form of such air bag.

In recent years, among such mooring balloons, especially popular one comprises a smaller balloon such as ad balloon and, in particular, a small sized balloon in the form of toy balloon designed with varied characters and patterns is in the spotlight.

For instance, smaller balloons which have been often used in various sports stadium, large scale entertainment stages for performance of artists, moderate and small indoor party rooms and the like can be directly possessed by individuals took part with the observance, and also enhance visual effect for them by floating numerous balloons with varied colors at the same time and from a number of locations and keeping them to desirable height.

However, in such case, each of the gas balloons does not carry the gas filled in the balloon but discharges it out of the balloon as time goes by and, thus, does not keep the static buoyancy to a constant level required to float the balloon. As a result, the respective gas balloons

gradually fall down and have different floating heights along to degree of falling down, thereby, lead a problem of reduced visual effect.

## 5 SUMMARY OF THE INVENTION

In order to solve such problem, the present invention proposes an improved gas balloon comprising balloon member and weight control member and has a purpose of conveniently  
10 controlling the floating height of the gas balloon in the air by detaching magnetic piece of said weight control member formed at lower part of said balloon member, attaching/detaching sticker or magnetic piece while the balloon is floating in  
15 the air, so that the present balloon can incite mood and/or atmosphere of various observances including meeting, game and so on to coincide with them held in appropriate places such as indoor rooms and be effectively utilized as an  
20 advertisement means.

The foregoing, as well as additional features and advantages of the invention will be apparent from the following detailed description, which proceeds with reference to the accompanying  
25 drawings.

## BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view illustrating a gas balloon of the present invention with magnetic  
5 pieces decomposed in sections;

Fig. 2 is a cross-sectional side view of the gas balloon shown in Fig. 1;

Fig. 3 is another perspective view illustrating a gas balloon of the present  
10 invention with cutting-off piece of the weight control member shown in detail according to a first embodiment of the present invention; and

Fig. 4 is a cross-sectional side view of the gas balloon shown in Fig. 3.

15 [Meaning of numeral parts of the balloon described in drawings]

	1,11	: gas balloon
	2,12	: balloon member
	2a	: handle part
20	3	: magnetic plate
	4, 14	: weight control member
	5	: large magnet piece
	5a	: small magnet piece
	6	: reinforcement coating layer
25	7	: silver coating layer

8 : outer surface fabric cloth

9 : cutting-off line

10 : cutting-off piece

## 5 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Fig. 1 shows a perspective view of a gas balloon having floating height control ability with a weight control member of the magnetic piece for controlling the weight as decomposed from  
10 balloon member of the gas balloon according to the present invention, and Fig. 2 is a cross-sectional side view of the same gas balloon illustrated in Fig. 1.

Such gas balloon 1 which commonly comprises a  
15 handle part 2a formed on lower central end of a balloon member 2 filled with floating gas to allow the balloon to float in the air by static buoyancy of said gas, characterized in that the handle part 2a which is formed at the central lower end of the  
20 balloon member, the magnet plate is layed, and are connected and composed to be a weight control member 4 and also several large magnetic piece 5 and small magnetic piece 5a are connected so that to be easily detachable, said magnetic plate 3 is  
25 made of the rubber magnet which is thin plate type

and having an excellent elastic power.

And also large magnet piece 5 and small magnet piece 5a are composed with thin rubber magnet having an excellent elastic power and are  
5 from 0.2g to 0.5g in weight for the small size gas balloon 1.

Such balloon member 2 may be a spherical toy balloon capable of being filled with hydrogen or helium gas and formed of reinforcement coating  
10 layer 6, silver foil coating layer 7 and outer surface (fabric) cloth 8.

Compared to a common small balloon generally consisting of only silver foil coating layer 7 and outer surface cloth 8, the gas balloon of the  
15 present invention has further a reinforcement coating layer 6 inside of the said silver foil coating layer 7 in a laminated form to ensure safety and durability of the balloon.

Accordingly, by cutting the large and small  
20 piece 5 and 5a gradually with gripping the handle part 2a of weight control member 4, the large and small piece 5 and 5a reduces its weight and generates floating power equal to amount of the weight reduced by the large and small piece 5 and  
25 5a, thereby makes the gas balloon 1 to rise in the

air.

For example, the gas balloon 1 according to the present invention can control its floating height to a desirable level by removing the large and small piece 5 and 5a of the weight control member 4, even when such gas balloon 1 is used for long term and gradually falls down due to the gas filled in the balloon member flowing out of the member as time goes by, thus, inducing loss of the static buoyancy of the member.

Whenever several the balloons 1,1.. are flying in air at constant level, the user can continuously check the gas buoyancy of the balloon with passage of time and repeatedly cut and remove the large and small piece 5 and 5a of the weight control member 4 to control floating height of the balloon 1 to the constant level required dependent on circumstantial atmosphere and/or places.

Fig 3 shows the perspective view in the first embodiment of the present invention wherein cutting-off pieces of the weight control member is removed, and fig 4 is a cross-sectional view of the fig 3 and the weight control member 14 is formed in the long band type, and plurality of cutting-off pieces 10 are formed for controlling



the floating power of gas balloon 1 by cutting-off line 9 removing at the same time, from the lower part one or plurality of them.

Accordingly, cutting-off pieces 10 which are  
5 removed by an user who grips the weight control member 14 and takes off the pieces 5, 5a along the cutting-off line 9 can serve as a weight control part of the balloon member 12. By such cutting-off pieces 10, the weight control member 14 reduces  
10 its weight and generates floating power equal to amount of the weight reduced by the cutting-off pieces 10, thereby makes the gas balloon 11 to rise in the air.

As described above, the gas balloons 1, 11  
15 comprising the balloon members 2, 12 and the weight control members 4, 14 according to the present invention have been described in detail by way of preferred embodiments which should not be construed to limit the scope; however, it is  
20 further understood by those skilled in the art that various changes and modifications, especially, in locations and/or shapes of the weight control members 4, 14 may be made in the invention without departing from the spirit and scope thereof.

## INDUSTRIAL APPLICABILITY

According to the present invention, it is possible to provide an improved gas balloon conveniently controlling the floating height of the gas balloon in the air by removing the large and small magnetic piece or by attaching while the balloon is floating in the air, so that the balloon can incite mood and/or atmosphere of various observances including meeting, game and so on to coincide with them held in appropriate places such as indoor rooms and be effectively utilized as an advertisement means; therefore it is expected that the gas balloon of the present invention is effectively useable in a wide range of relative applications.